USSN 09/376,604; AREX-P03-004

In the claims:

1-112. (**Cancelled**)

113. (**Currently amended**) A method for inducing a therapeutic host immune response against a multi-epitopic *in vivo* antigen that does not elicit an effective host immune response, the method comprising:

contacting a multi-epitopic antigen present in a host's serum with a composition comprising a binding agent that specifically binds to a first epitope on the antigen, the binding agent present in the composition being non-radiolabeled, and allowing the binding agent to form a binding agent/antigen pair, whereby an effective host immune-T cell response is elicited against a second epitope on the antigen in the binding agent/antigen pair.

114-116. (Cancelled)

- 117. (**Currently amended**) The method of <u>Claim claim 113</u>, wherein the host immune response comprises further comprising a humoral immune response.
- 118. (**Currently amended**) The method of <u>Claim claim</u> 113, wherein the multi-epitopic *in vivo* antigen is a soluble antigen.
- 119. (**Currently amended**) The method of <u>Claim claim</u> 118, wherein the soluble antigen is a soluble tumor-associated antigen.
- 120. (**Currently amended**) The method of <u>Claim-claim 118</u>, wherein the soluble antigen is associated with a human <u>disease or conditioncancer</u>.

121-122. (Cancelled)

123. (Currently amended) The method of Claim claim 113, wherein the binding agent is an antibody or a polypeptide including an antigen binding portion thereof.

- 124. (Cancelled)
- 125. (**Currently amended**) The method of <u>Claim-claim</u> 123, wherein the antibody is B43.13 which is produceable by a hybridoma having ATCC deposit number PTA-1883.
- 126-128. (Cancelled)
- 129. (Currently amended) The method of Claim-claim 113, wherein the antigen is CA125.
- 130. (Currently amended) The method of Claim claim 129, wherein the level of CA125 in the host's serum is greater than 100U/ml.
- 131. (Currently amended) The method of Claim claim 123, wherein the antigen is a soluble circulating antigen and the antigen is contacted with a sufficient amount of antibody to present all the circulating antigen to the immune system.
- 132. (Currently amended) The method of Claim-claim 113, wherein the antigen is contacted with binding agent in an amount of from 0.1 µg to 2 mg per kg of body weight of the host.
- 133. (**Currently amended**) The method of <u>Claim-claim 132</u>, wherein the antigen is contacted with binding agent in an amount from 1 µg to 200 µg per kg of body weight of the host.
- 134. (**Currently amended**) The method of <u>Claim claim 133</u>, wherein allowing the binding agent to form a binding agent/antigen pair presents other epitopes on the antigen to the host's immune system.
- 135. (**Currently amended**) A method for inducing a therapeutic host immune response against a multi-epitopic *in vivo* antigen that does not elicit an effective host immune response, comprising administering to the host a composition comprising a non-radiolabeled-binding agent that specifically binds to an epitope on the antigen, the binding agent present in the composition being non-radiolabeled, thereby forming a binding agent/antigen pair, whereby an effective immune-host T cell response is elicited against a second epitope of the antigen, the binding agent

being present in the composition in an amount of from 0.1 µg to 2 mg per kg of body weight of the host.

136. (Cancelled)

- 137. (**Currently amended**) The method of <u>Claim claim 135</u>, wherein the antigen is a soluble antigen.
- 138. (**Currently amended**) The method of Claim 135, wherein the antigen is a tumor antigen.
- 139. (**Currently amended**) The method of <u>Claim-claim</u> 137, wherein the antigen is a tumor antigen.

140. (Cancelled)

- 141. (Currently amended) The method of Claim claim 113, wherein the composition comprising a binding agent further comprises one or more adjuvants, one or more carriers, one or more excipients, one or more stabilizers, one or more pharmaceutically acceptable carriers and/or physiologically acceptable saline.
- 142. (**Currently amended**) The method of Claim claim 113, wherein contacting comprises administering by any immunologically suitable route.
- 143. (**Currently amended**) The method of <u>Claim claim</u> 142, wherein administering by any immunologically suitable routes comprises intravenous, subcutaneous, intraperitoneal, intradermal, intramuscular, or intralymphatic routes.
- 144. (**Currently amended**) The method of Claim claim 142, wherein administering by any immunologically suitable route comprises administering in solution, tablet, or aerosol form.

145-169. (Cancelled)

- 170. (Currently amended) The method of Claim claim 135, wherein the composition comprising a binding agent further comprises one or more adjuvants, one or more carriers, one or more excipients, one or more stabilizers, one or more pharmaceutically acceptable carriers and/or physiologically acceptable saline.
- 171. (**Previously presented**) The method of claim 135, wherein the composition is administered by any immunologically suitable route.
- 172. (**Currently amended**) The method of Claim latin 171, wherein administering by any immunologically suitable route comprises intravenous, subcutaneous, intraperitoneal, intradermal, intramuscular, or intralymphatic routes.
- 173. (**Currently amended**) The method of <u>Claim-claim 171</u>, wherein administering by any immunologically suitable route comprises administering in solution, tablet, or aerosol form.
- 174. (Currently amended) A method for inducing a therapeutic host immune response against a multi-epitopic *in vivo* antigen that does not elicit an effective host immune response, the method comprising contacting a multi-epitopic *in vivo* antigen present in a host's serum with a composition comprising a binding agent that specifically binds to an epitope on the antigen, the binding agent present in the composition being non-radiolabeled, and allowing the binding agent to form a binding agent/antigen complex, wherein the binding agent/antigen complex elicits an effective host immune-T cell response against a second epitope of the multi-epitopic *in vivo* antigen.
- 175. (Currently amended) The method of Claim_claim_174, wherein the effective host immune response is elicited against an epitope on the binding agent/antigen complex.
- 176-179. **Cancelled**)
- 180. (Currently amended) The method of Claim claim 174, wherein the multi-epitopic in vivo antigen is a soluble antigen.

- 181. (**Currently amended**) The method of claim 180, wherein the soluble antigen is a soluble tumor-associated antigen.
- 182. (Currently amended) The method of Claim claim 180, wherein the soluble antigen is associate with a human disease or condition cancer.
- 183-184. (Cancelled)
- 185. (**Currently amended**) The method of <u>Claim claim</u> 174, wherein the binding agent is an antibody or a polypeptide including an antigen binding portion thereof.
- 186. (Cancelled)
- 187. (**Currently amended**) The method of <u>Claim claim</u> 174, wherein the binding agent is B43.13 which is produceable by a hybridoma having ATCC deposit number PTA-1883.
- 188-189. (Cancelled)
- 190. (**Currently amended**) The method of <u>Claim claim</u> 185, wherein the antibody comprises a native is a non-human antibody.
- 191. (Currently amended) The method of Claim-claim 174, wherein the antigen is CA125.
- 192. (Currently amended) The method of Claim claim 191, wherein the level of CA125 in the host's serum is greater than 100 U/ml.
- 193. (Currently amended) The method of Claim-claim 185, wherein the antigen is soluble circulating antigen and the antigen is contacted with a sufficient amount of antibody to present all the circulating antigen to the immune system.
- 194. (**Currently amended**) The method of Claim-claim 174, wherein the antigen is contacted with binding agent in an amount from 0.1 µg to 2 mg per kg of body weight of the host.

- 195. (**Currently amended**) The method of Claim-claim 194, wherein the antigen is contacted with binding agent in an amount from 1 µg to 200 µg per kg of body weight of the host.
- 196. (Currently amended) The method of Claim claim 174, wherein allowing the binding agent to form a binding agent/antigen complex presents other epitopes on the antigen to the host's immune system.
- 197. (**Currently amended**) The method of <u>Claim claim 174</u>, wherein the composition comprising a binding agent further comprises one or more adjuvants, one or more carriers, one or more excipients, one or more stabilizers, one or more pharmaceutically acceptable carriers and/or physiologically acceptable saline.
- 198. (Currently amended) The method of Claim-claim 174, wherein contacting comprises administering by any immunologically suitable route.
- 199. (**Currently amended**) The method of <u>Claim-claim</u> 198, wherein administering by any immunologically suitable route comprises intravenous, subcutaneous, intraperitoneal, intradermal, intramuscular, or intralymphatic routes.
- 200. (**Currently amended**) The method of Claim 198, wherein administering by any immunologically suitable route comprises administering in solution, tablet, or aerosol form.
- 201. (**Currently amended**) A method for inducing a therapeutic host immune response against a multi-epitopic *in vivo* antigen that does not elicit an effective host immune response, comprising administering to the host a composition comprising a non-radiolabeled binding agent that specifically binds to an epitope on the antigen, the binding agent present in the composition being non-radiolabeled, thereby forming a binding agent/antigen complex, whereby an effective immune-host T cell response is elicited against the binding agent/antigen complex, the binding agent being present in the composition in an amount of from 0.1 μg to 2 mg per kg of body weight of the host.

- 202. (Currently amended) The method of Claim claim 201, wherein the antigen is a soluble antigen.
- 203. (Currently amended) The method of Claim claim 201, wherein the antigen is a tumor antigen.
- 204. (Currently amended) The method of Claim claim 202, wherein the antigen is a tumor antigen.
- 205. (Cancelled)
- 206. (Currently amended) The method of Claim claim 201, wherein the composition comprising a binding agent further comprises one or more adjuvants, one or more carriers, one or more excipients, one or more stabilizers, one or more pharmaceutically acceptable carriers and/or physiologically acceptable saline.
- 207. (**Previously presented**) The method of claim 201, wherein the composition is administered by any immunologically suitable route.
- 208. (**Currently amended**) The method of <u>Claim claim 207</u>, wherein administering by any immunologically suitable route comprises intravenous, subcutaneous, intraperitoneal, intradermal, intramuscular, or intralymphatic routes.
- 209. (Currently amended) The method of Claim-claim 207, wherein administering by any immunologically suitable route comprises administering in solution, tablet, or aerosol form.
- 210-234. (Cancelled)
- 235. (**Previously presented**) The method according to any one of claims [[115-121]]117-120, 129, 130, 132-135, 137-139, 141-144, 170-175, [[177-183]]180, 182, 191-192, 194-204, or 206-209 wherein the binding agent is an antibody.

- 236. (**Previously presented**) The method of claim 235, wherein the antibody is a murine monoclonal antibody.
- 237. (**Previously presented**) The method of claim 235, wherein the antibody is an Ab1 antibody.
- 238. (**Previously presented**) The method according to any one of claims 123, 185, 190, or 193, wherein the antibody is an Ab1 antibody.
- 239. (**Previously presented**) The method according to claim 123 or 185 wherein the antibody or polypeptide including an antigen binding portion thereof is selected from the group consisting of a chimeric monoclonal antibody, a genetically engineered monoclonal antibody, a Fab fragment, a $F(ab')_2$ fragment, and a single chain fragment.
- 240. (New) The method according to claim 113, wherein the binding agent is administered to a host by any immunologically suitable route.
- 241. (New) The method according to claim 113, wherein the T cell response is directed against a host cell of the patient.
- 242. (New) The method according to claim 241, wherein the host cell of the patient is a cancerous cell.
- 243. (New) The method according to claim 113, wherein the antigen is a cell-surface-associated antigen with a carbohydrate moiety.
- 244. (New) The method according to claim 243, wherein the cell-surface associated antigen is a tumor-associated antigen.
- 245. (New) The method of claim 240, wherein administering by any immunologically suitable routes comprises intravenous, subcutaneous, intraperitoneal, intradermal, intramuscular, or intralymphatic routes.

- 246. (New) The method of claim 240, wherein administering by any immunologically suitable route comprises administering in solution, tablet, or aerosol form.
- 247. (New) The method according to claim 113, wherein the binding agent is photoactivated.
- 248. (New) The method according to claim 135, wherein the binding agent is photoactivated.
- 249. (New) The method according to claim 174, wherein the binding agent is photoactivated.
- 250. (New) The method according to claim 201, wherein the binding agent is photoactivated.
- 251. (New) The method of claim 135, further comprising a humoral immune response.
- 252. (New) The method of claim 174, further comprising a humoral immune response.
- 253. (New) The method of claim 201, further comprising a humoral immune response.
- 254. (New) The method of claim 113, wherein the binding agent is administered in a 2 mg dosage.
- 255. (New) The method of claim 135, wherein the binding agent is administered in a 2 mg dosage.
- 256. (New) The method of claim 174, wherein the binding agent is administered in a 2 mg dosage.
- 257. (New) The method of claim 201, wherein the binding agent is administered in a 2 mg dosage.